AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1.   (Currently Amended) A method for scheduling a decoding process of coded data blocks transmitted over a wireless link in a communication network, the method comprising:

storing a coded, data block in a queue if all decoders of a cluster of iterative decoders are unavailable;

decoding the coded data block in a decoder of said cluster;

returning any of the coded data block being unsuccessfully decoded to said queue; [[and]]

combining said unsuccessfully decoded data block with a corresponding retransmitted coded data block;

wherein a transmission between a physical layer of a stack of protocols in a communication apparatus and a physical layer of a stack of protocols in the communication network is controlled by a protocol requiring an ACK/NACK-report of the transmission within a predetermined time limit; and

wherein the NACK-report is transmitted to a transmitter of the data block if the time limit is reached before the stored data block is moved to any of the decoders of the cluster.

2.   (Previously Presented) The method according to claim 1, wherein the iterative decoders of the cluster are arranged in parallel.

3. – 4. (Canceled)

5.   (Currently Amended) The method according to claim [[4]] 1, wherein the ACK report is transmitted to the transmitter of the data block if said block is successfully decoded in any of the decoders of the cluster within the time limit.

6.   (Previously Presented) The method according to claim 5, wherein the NACK report is transmitted to the transmitter of the data block if said block is unsuccessfully decoded in any of the decoders of the cluster within the time limit.

7.   (Previously Presented) The method according to claim 6, wherein the NACK report is transmitted to the transmitter of the data block if the decoding of said block in any of the decoders of the cluster is not finished within the time limit.

8.   (Previously Presented) The method according to claim 7 wherein the data block is moved into the end of the queue.

9.   (Previously Presented) The method according to claim 8, wherein the data block being unsuccessfully decoded is combined with a retransmitted data block to a combined data block and stored in the queue.

10.   (Previously Presented) The method according to claim 9, wherein the combined data block is processed.

11.   (Previously Presented) The method according to claim 10, wherein the data blocks are moved from the queue to any of the decoders of the cluster according to a First In First Out (FIFO) principle.

12.   (Previously Presented) The method according to claim 10, wherein the data blocks are moved from the queue to any of the decoders of the cluster according to an "oldest data block first" principle.

13.   (Previously Presented) The method according to claim 12, wherein a maximum number of iterations in a certain decoder of said cluster is adapted automatically by a CPU.

14.   (Previously Presented) The method according to claim 13, wherein the maximum number of iterations is adapted in dependence on the number of blocks being moved directly from a beginning to the end of the queue.

15.   (Previously Presented) The method according to claim 14, wherein the maximum number of iterations is adapted in dependence on whether the a coded data block to be decoded for a first time or a combined data block is received by said decoder.

16.   (Previously Presented) The method according to claim 15, wherein the decoders are activated automatically by the CPU when a bitrate of a received stream of data blocks reaches certain predefined levels.

17.   (Previously Presented) The method according to claim 16, wherein the decoding process of any of the decoders of the cluster is terminated before a maximum number of iterations is reached.

18.   (Previously Presented) The method according to claim 17, wherein the coded data blocks are received according to a HARQ (Hybrid ARQ) protocol.

19.   (Currently Amended) An electronic communication apparatus capable of decoding coded data blocks received over a wireless link in a communication network, the apparatus comprising;
    a queue, which is adapted for temporarily storing the coded data blocks;
    a cluster of decoders, which is adapted to decode the coded data blocks when any of the decoders of the cluster is available and to return to said queue any coded data block being unsuccessfully decoded by any of said decoders; [[and]]

a controller, which is adapted to combine the coded data block being unsuccessfully decoded with a corresponding retransmitted coded data block;

wherein said apparatus is adapted to receive the data blocks according to a protocol requiring a ACK/NACK-report within a predetermined time limit; and

wherein said apparatus is adapted for transmitting the NACK-report to a transmitter of the data block if said block is not moved to any of the decoders of the cluster within the time limit.

20.   (Previously Presented) The electronic communication apparatus according to claim 19, wherein the decoders -of the cluster are arranged in parallel.

21.   (Previously Presented) The electronic communication apparatus according to claim 20, wherein said apparatus comprises a receiver, which is adapted for receiving the data blocks with a bitrate of up to at least 15 Mbps.

22.   (Previously Presented) The electronic communication apparatus according to claim 20, wherein said apparatus comprises a receiver, which is arranged to receive the coded data blocks according to a HARQ protocol.

23. – 24.   (Canceled)

25.   (Currently Amended) The electronic communication apparatus according to claim [[24]] 19, wherein said apparatus is adapted for transmitting the ACK-report to the transmitter of the data block if said block is unsuccessfully decoded in any of the decoders of the cluster within the time limit.

26.   (Previously Presented) The electronic communication apparatus according to claim 25, wherein said apparatus is adapted for transmitting the a NACK-report to the transmitter of the data block if said block is unsuccessfully decoded in any of the decoders of the cluster within the time limit.

27.   (Previously   Presented)   The   electronic   communication   apparatus according to claim 26, wherein said apparatus is adapted for transmitting the NACK-report to the transmitter of the data block if the decoding of said block in any of the decoders of the cluster can not be finished within the time limit.

28.   (Previously   Presented)   The   electronic   communication   apparatus according to claim 27, wherein said apparatus further comprises: feedback loops between a beginning of the queue and an end of the queue, and between the cluster of decoders and the end of the queue; and wherein said apparatus is adapted for moving the data block to the end of the queue when the decoding is not initiated or successfully completed.

29.   (Previously   Presented)   The   electronic   communication   apparatus according to claim 28, wherein said apparatus is adapted for receiving a retransmitted data block, combining the retransmitted data block with a stored data block to a combined data block, and storing the combined data block.

30.   (Previously   Presented)   The   electronic   communication   apparatus according to claim 29, wherein said apparatus is adapted to process the combined data block.

31.   (Previously   Presented)   The   electronic   communication   apparatus according to claim 30, wherein the queue is provided as a rewritable memory.

32.   (Previously   Presented)   The   electronic   communication   apparatus according to claim 31, wherein a controller of the apparatus is arranged to automatically adapt the number of active decoders when the bitrates of the received stream of data blocks reaches certain predefined levels.

33.   (Previously   Presented)   The   electronic   communication   apparatus according to claim 32, wherein the controller is arranged to adapt the maximum number

of iterations of a certain decoder in dependence on the number of blocks being moved directly from the beginning to the end of the queue.

34.   (Previously Presented) The electronic communication apparatus according to claim 33, wherein the controller is arranged to adapt the maximum number of iterations of a certain decoder in dependence on whether a coded data block to be decoded for the first time or the combined data block is received by said decoder.

35.   (Previously Presented) The electronic communication apparatus according to claim 34, wherein the apparatus is further adapted to move the data blocks from the queue to any of the decoders of the cluster according to a First In First Out (FIFO) principle.

36.   (Previously Presented) The electronic communication apparatus according to claim 35, wherein the apparatus is further adapted to move the data blocks from the queue to any of the decoders of the cluster according to an "oldest data block first" principle.

37.   (Previously Presented) The electronic communication apparatus according to claim 36, wherein the controller is arranged to terminate the decoding process of any of the decoders of the cluster before a maximum number of iterations are reached.

38.   (Currently Amended) The electronic communication apparatus according to claim 37, wherein said apparatus is one selected from the group consisting of a mobile telephone, a communicator, an electronic organizer, or a smartphone.

39.   (Canceled)